

## **ABSTRACT**

Methods and apparatus are provided for an accelerometer. The apparatus includes first, second, and third substrates. The first substrate includes the first plate of a first capacitor. The second substrate includes a moveable mass that is coupled to the second substrate by at least one spring. The moveable mass is the second plate of the first capacitor and the first plate of a second capacitor. The third substrate includes the second plate of the second capacitor. The moveable mass is prevented from moving in any direction where the at least one spring is inelastically flexed. The first substrate couples to the second substrate. The third substrate couples to the second substrate. The method includes forming a moveable mass in a substrate. The moveable mass is formed having a plurality of springs coupling the moveable mass to the substrate. The moveable mass is released using a dry etch.